

Design Tip #66 Implementation Analysis Paralysis

By Bob Becker

Many data warehouse teams lean heavily toward the doing side. They leap into implementation activities without spending enough time and energy to develop their data models, identify thorough business rules, or plan their data staging processes. As a result, they charge full speed ahead and end up re-working their processes, delivering bad or incomplete data, and generally causing themselves difficulty.

Other project teams have the opposite challenge. These teams are committed to doing their homework in all the critical areas. They are focused on data quality, consistency, completeness and stewardship. However, these project teams sometimes bog down on issues that should have been resolved long ago. Of course, this impasse occurs at the worst time – the promised implementation dates are rapidly approaching and design decisions that should be well into implementation remain unresolved.

Naturally, the outstanding issues involve the most difficult choices and the project team disagrees on the best solutions. The easy issues have already been resolved and the solutions for the more difficult issues don't come as easily. Despite copious amounts of time spent in research, data profiling, design meetings and informal discussions, nothing seems to move the team closer to a decision on the best approach. The project sits at a crossroads unable to move forward. By this time, fear has usually taken hold of the project team. The pressure is on.

One helpful approach is the use of an arbitrator (a trusted individual from outside the project team) to help move the team ahead. The outstanding issues are identified and meetings scheduled with the arbitrator and interested stakeholders. All participants must agree that a final decision will be made during these sessions. The arbitrator should establish a time box to limit discussion on each issue. Discuss the pros and cons of each approach one last time; the arbitrator makes the ultimate decision if the team can't reach consensus.

Another approach is to defer the unresolved issues until a future implementation after further research and discussion have identified an appropriate solution. The downsides to this approach are that the business requirements may not allow the issues to be deferred; postponing resolution may simply delay the inevitable without any significant gain.

There is a delicate balance between planning and doing in the data warehouse world. The goal is to identify reasonable solutions, not necessarily perfect solutions, so the team can transition from planning to implementation. There may still be more to learn, but the implementation process is often more effective at revealing the weak spots in the plan so they can be reinforced than any amount of talking and planning. In fact, for many of the hard choices, much of the information needed to make good choices can only be gained through trial and error.

Clearly, we are not advocating a casual, ad hoc approach to implementing the data warehouse. But we recognize that sometimes you must be pragmatic and move forward with less than ideal solutions that may need to be revisited to achieve your overall goals.